What is claimed is:

[Claim 1] 1. A biologic fluid sampling device comprising

a biologically compatible reservoir having an interior chamber for receiving a biologic fluid, a fluid access port, and a fluid egress port,
a needle in fluid communication with said chamber through said fluid egress port, and
a valve interposed between said chamber and said needle whereby flow of biologic fluid from said chamber through said needle may be selectively controlled.

[Claim 2] 2.The sampling device according to claim 1 further comprising a rigid base supporting said valve, said base being coupled to said reservoir and to said needle and supporting said needle in fixed relationship with respect to said reservoir.

[Claim 3] 3.The sampling device according to claim 2 wherein said rigid base has at least one side wall coupled to said base.

[Claim 4] 4.The sampling device according to claim 3 wherein said rigid base has a central beam extending generally linearly from said fluid egress port to said needle.

[Claim 5] 5.The sampling device a according to claim 4 further comprising a flexible tube extending along said central beam from said fluid egress port to said needle and wherein said valve comprises an arm pivotally connected to said rigid connector and extending across tube and said central beam such that said tube can be compressed between said beam and said arm.

[Claim 6] 6.The sampling device according to claim 5 wherein said arm has a fixed end and a movable end and said device further comprises a bracket mounted on said connector, said moveable end of said arm being connected to said bracket, and a hinge mounted on said connector, said fixed end of said arm being connected to said hinge.

[Claim 7] 7.The sampling device according to claim 6 wherein said bracket further comprises a pair of opposed latches and said moveable end of said arm further comprises a tab configured to be captured between said latches.

[Claim 8] 8.The sampling device according to claim 7 further comprising a ridge extending along said arm, said ridge being configured to selectively press against said tube.

[Claim 9] 9.The sampling device according to claim 1 further comprising a bottle adapter connected to said valve and surrounding said needle.

[Claim 10] 10.The sampling device according to claim 9 wherein said bottle adapter further comprises a needle mount for connecting said needle, an elongated base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle is enclosed within said bottle adapter, and a plurality of inwardly extending, longitudinal fins connected to said wall and spaced around said needle mount.

[Claim 11] 11.The sample device according to claim 10 wherein said fins form a generally cylindrical space centered on said needle.

[Claim 12] 12.The sampling device according to claim 11 wherein said bottle adaptor further comprises an elliptical lid pivotally connected to said wall distal from said base at a hinge.

[Claim 13] 13.The sampling device according to claim 12 further comprising a needle cap removably fitted over said needle within said bottle adaptor.

[Claim 14] 14.The sampling device according to claim 13 wherein said needle cap further comprises a grip extending from a distal end of said needle cap, said grip configured to extend through a slot in said lid when said lid is closed on said bottle adapter.

[Claim 15] 15.The sampling device according to claim 9 wherein said bottle adapter further comprises a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle is enclosed within said bottle adaptor, said wall being deformable from a first configuration into a second configuration.

[Claim 16] 16.The sampling device according to claim 15 wherein in said first configuration of said bottle adaptor, said wall is generally elliptical and in said second configuration said wall is generally circular.

[Claim 17] 17.The sampling device according to claim 16 wherein said wall of said bottle adaptor further comprises at least one longitudinally extending expandable fold.

[Claim 18] 18.The sampling device according to claim 17 wherein said wall of said bottle adaptor further comprises a plurality of expandable folds, said folds being symmetrically spaced around said wall.

[Claim 19] 19.The sampling device according to claim 9 wherein said bottle adaptor further comprises an elliptical lid pivotally connected to said wall distal from said base at a hinge.

[Claim 20] 20.The sampling device according to claim 19 wherein said bottle adaptor further comprises a latch mounted on said wall adjacent said hinge and said lid further comprises a catch adapted to engage said latch, whereby said lid is secured in an open position along said wall.

[Claim 21] 21.The sampling device according to claim 9 further comprising a needle cap removably fitted over said needle within said bottle adaptor.

[Claim 22] 22.The sampling device according to claim 21 wherein said bottle adaptor further comprises a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle is enclosed within said bottle adaptor, said needle mount comprising a cylindrical connector, said needle cap being adapted to connect to said cylindrical connector.

[Claim 23] 23.The sampling device according to claim 22 wherein said bottle adaptor further comprises a lid pivotally connected to said wall by a hinge and a clasp connected to said wall for securing said lid in a closed position, said lid having a centrally located protrusion, said protrusion contacting a distal end of said needle cap when said lid is in said closed position, said protrusion forcing said cap onto said male connector.

[Claim 24] 24.The sampling device according to claim 21 wherein said needle cap further comprises a grip extending from a distal end of said needle

cap, said grip configured to extend through a slot in said lid when said lid is closed on said bottle adapter.

[Claim 25] 25.The sampling device according to claim 1 further comprising a biologic fluid product bag, a tube connecting said bag to said fluid access port of said biologically compatible receptacle, and a frangible valve interposed in said tube.

[Claim 26] 26.The sampling device according to claim 1 further comprising a coupling at a proximal end of said needle, a needle cap removably fitted over said needle and releasably connected to said coupling, and a bottle adaptor configured to removably connect to said coupling.

[Claim 27] 27.The sampling device of claim 26, wherein said bottle adaptor comprises a centrally located bore, said coupling being adapted to fit within said bore, and a slot extending lengthwise from said bore such that said needle and said needle cap can be inserted into said bottle adaptor through said slot.

[Claim 28] 28.The sampling device of claim 27, wherein said coupling comprises a neck.

[Claim 29] 29. A biologic fluid sampling device comprising

a biologically compatible receptacle having an interior chamber for receiving a biologic fluid, a fluid access port, and a fluid egress port,
a needle in fluid communication with said chamber through said fluid egress port, and
a bottle adapter connected to said valve and surrounding said needle, said bottle adapter having a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall

connected to said base and extending along said needle such that said needle is enclosed within said bottle adaptor, and a plurality of inwardly extending, longitudinal fins connected to said wall and spaced around said needle mount.

[Claim 30] 30.The sample device according to claim 29 wherein said fins form a generally cylindrical space centered on said needle.

[Claim 31] 31.The sampling device according to claim 30 wherein said bottle adaptor further comprises an elliptical lid pivotally connected to said wall distal from said base at a hinge.

[Claim 32] 32.The sampling device according to claim 31 further comprising a needle cap removably fitted over said needle within said bottle adaptor.

[Claim 33] 33.The sampling device according to claim 32 wherein said needle cap further comprises a grip extending from a distal end of said needle cap, said grip configured to extend through a slot in said lid when said lid is closed on said bottle adapter.

[Claim 34] 34. A biologic fluid sampling device comprising

a biologically compatible receptacle having an interior chamber for receiving a biologic fluid, a fluid access port, and a fluid egress port,
a needle in fluid communication with said chamber through said fluid egress port, and
a bottle adapter connected to said valve and surrounding said needle, said bottle adapter having a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle is enclosed within said bottle adaptor, said wall being deformable from a first configuration into a second configuration.

[Claim 35] 35.The sampling device according to claim 34 wherein in said first configuration of said bottle adaptor, said wall is generally elliptical and in said second configuration said wall is generally circular.

[Claim 36] 36.The sampling device according to claim 35 wherein said wall of said bottle adaptor further comprises at least one longitudinally extending, expandable fold.

[Claim 37] 37.The sampling device according to claim 36 wherein said wall of said bottle adaptor further comprises a plurality of expandable folds, said folds being symmetrically spaced around said wall.

[Claim 38] 38.The sampling device according to claim 37 wherein said bottle adaptor further comprises an elliptical lid pivotally connected to said wall distal from said base at a hinge.

[Claim 39] 39.The sampling device according to claim 38 wherein said bottle adaptor further comprises a latch mounted on said wall adjacent said hinge and said lid further comprises a catch adapted to engage said latch, whereby said lid is secured in an open position along said wall.

[Claim 40] 40.The sampling device according to claim 34 further comprising a needle cap removably fitted over said needle within said bottle adaptor.

[Claim 41] 41.The sample device according to claim 40 wherein said bottle adaptor further comprises a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle

is enclosed within said bottle adaptor, said needle mount comprising a cylindrical connector, said needle cap being adapted to connect to said cylindrical connector.

[Claim 42] 42.The sample device according to claim 41 wherein said bottle adaptor further comprises a lid pivotally connected to said wall by a hinge and a clasp connected to said wall for securing said lid in a closed position, said lid having a centrally located protrusion, said protrusion contacting a distal end of said needle cap when said lid is in said closed position, said protrusion forcing said cap onto said cylindrical connector.

[Claim 43] 43. A biologic fluid sampling device comprising

a biologically compatible receptacle having an interior chamber for receiving a biologic fluid, a fluid access port, and a fluid egress port,
a needle in fluid communication with said chamber through said fluid egress port, and
a bottle adapter connected to said valve and surrounding said needle, said bottle adapter having a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle is enclosed within said bottle adaptor, and
a needle cap removably fitted over said needle within said bottle adaptor.

[Claim 44] 44.The sampling device according to claim 43 wherein said bottle adaptor further comprises a needle mount for connecting said needle, a base circumferentially surrounding said needle mount and attached thereto, a wall connected to said base and extending along said needle such that said needle is enclosed within said bottle adaptor, a cylindrical connector mounted on said base and circumferentially surrounding said needle mount, said needle cap being adapted to connect to said cylindrical connector.

[Claim 45] 45.The sample device according to claim 44 wherein said bottle adaptor further comprises a lid pivotally connected to said wall by a hinge and a clasp connected to said wall for securing said lid in a closed position, said lid having a centrally located protrusion, said protrusion contacting a distal end of said needle cap when said lid is in said closed position, said protrusion forcing said cap onto said connector.

[Claim 46] 46. A biologic fluid sampling device comprising

a biologically compatible receptacle having an interior chamber for receiving a biologic fluid, a fluid access port, and a fluid egress port,
a needle in fluid communication with said chamber through said fluid egress port,
a collar at a proximal end of said needle,
a needle cap removably fitted over said needle and releasably connected to said collar, and
a bottle adaptor configured to removably connect to said collar.

[Claim 47] 47.The sampling device of claim 46, wherein said bottle adaptor comprises a centrally located bore, said collar being adapted to fit within said bore, and a slot extending lengthwise from said bore such that said needle and said needle cap can be inserted into said bottle adaptor through said slot.

[Claim 48] 48.The sampling device of claim 47, wherein said coupling comprises a neck.